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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,305	07/16/2001	Victor G Stimpson	110116	2332

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EXAMINER

SOHN, SEUNG C

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,305

Applicant(s)

STIMPSON ET AL.

Examiner

Seung C. Sohn

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 4-8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "machine" in claim 1, the "machines" in claim 9, and the "machine tool" in claims 3 and 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
4. The incorporation of essential material in the specification (page 5, lines 14-19) by reference to a foreign application (EP 00303749.6) or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by

reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

5. The disclosure is objected to because of the following informalities:

On page 7, line 4, define t in the " $t_1 + \frac{1}{2} t$ ".

Appropriate correction is required.

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
DEVELOPMENT.

(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer
program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)),
and tables having more than 50 pages of text are permitted to be
submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37
CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A

"Sequence Listing" is required on paper if the application discloses a
nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if
the required "Sequence Listing" is not submitted as an electronic
document on compact disc).

Claim Objections

7. **Claims 2 and 10** are objected to because of the following informalities:

On claim 2, line 1, "claim 1 and comprising" should be changed to – claim 1
comprising --.

On claim 10, line 1, "Optical measuring apparatus" should be changed to --
Optical apparatus --.

On claim 10, line 1, "claim 9 and wherein" should be changed to -- claim 9
wherein --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. ***Claims 9-10 are rejected under 35 U.S.C. 112, second paragraph***, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On claim 9, "which" in line 4 is vague and confusing. What does the "which" refer to? **Claim 9** recites the limitation "a signal" in line 6. There is insufficient antecedent basis for this limitation in the claim. Does it refer to "a signal" in claim 4 or another signal? **Claim 9** also recites the limitation "said signal" in line 12. There is insufficient antecedent basis for this limitation in the claim. Does it refer to "a signal" in line 4, "a signal" in line 6, or "said signals" in lines 8-9? Clarifications are required.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Schultz et al. (Patent No. DE 3,905,949 A).

Referring to claim 1, Schulz et al. shows in Figs. 1 & 2 the following steps of Applicant's claim:

a) generating a detection signal within the detector (13) each time the beam is interrupted (Col. 3, lines 54-62);

b) evaluating the frequency and/or duration of the occurrences of said detection signals (Col. 4, lines 11-16);

c) emitting an output signal from the detector (13) only if a further detection signal is present within the detector in a specified time interval from the generation of an earlier detection signal (Col. 5, lines 3-13).

Referring to claim 2, Schulz et al. discloses the steps of

d) rotating the object (2);

e) generating a first time interval (t1) which is dependent on the speed of rotation of the object (2); and

f) generating the specified time interval as a time interval (t2) which is shorter than (t1) and commences at the end of the interval (t1) (Col. 5, lines 49-56).

Referring to claim 3, Schulz et al. discloses that the object (2) is a tool (i.e., cutting edges) on a machine tool (1, i.e., rotary milling tool) and the tool is rotated at a

known specific speed and the time interval (t1) is substantially equal to the time taken for one revolution of the tool (2) (Col. 4, lines 60-68).

Referring to claim 9, Schultz et al. shows in Figs. 1-2 the following elements of Applicant's claim:

- a) a light source (8) for generating a light beam (Col. 3, lines 54-58); and
- b) a detector for receiving said beam and which generates a signal when the beam is interrupted (Col. 5, lines 3-13), wherein the detector includes
 - ba) a detection circuit which generates a signal each time the beam is interrupted, and
 - bb) signal processing means (16, i.e., evaluation device) for evaluating the frequency and/or duration of the occurrences of said signals and which emits an output signal only if a second signal is generated by the detection circuit within a specified time interval after the occurrence of said signal (Col. 4, lines 11-16).

Referring to claim 10, Schultz et al. discloses that the object (2) is a tool (i.e., cutting edges) on a machine tool (1, i.e., rotary milling tool).

Allowable Subject Matter

12. **Claims 4-8** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is an examiner's statement of reasons for allowance:

Claims 4-8 are allowable because the prior art fails to disclose or make obvious, either singly or in combination, a method of making measurements of an object comprising, in addition to the other recited features of the claim, "causing the clock to initiate the emission of a series of pulses of short duration which are synchronized with the speed of rotation of the tool, the first pulse being emitted to coincide with a detection signal being generated in the detector; emitting an output signal from the detector only if a detection signal is also present within the detector during the existence of a clock pulse; stopping the clock if no such detection signal is present in the detector".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gremaud et al. (Patent No. US 5,004,930) discloses a method of precisely setting a workpiece.

Nishida (Patent No. US 5,433,649) discloses a blade position detection apparatus.

Cook et al. (Patent No. US 5,841,662) discloses a chucked work piece recognition method and apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung C. Sohn whose telephone number is (703) 308-4093. The examiner can normally be reached on Monday through Friday from 8:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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December 11, 2002



Kevin Pyo
Primary Examiner